

Spectrum Reform – Comments on the Consultation Paper

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This response provides comment and suggestions on the Proposals outlined in the Department of Communications Consultation Paper of November 2014. Although all proposals are of interest to us we have focused our attention on those that are most relevant to our activities and our experiences.

Proposal 1 - the policy framework

We have no additional comment on this Proposal.

Proposal 2 – A single licensing framework

We consider this to be the most important proposal for reform and we strongly support the introduction of a single licensing framework. Licensing is the control mechanism that underpins the entire spectrum management function. We believe that the current tri-part licensing system is unnecessarily cumbersome and does not serve the spectrum management process well.

We have previously submitted a more detailed “Considerations” document outlining an alternative “single licensing framework” and we would be happy to have that document tabled for general discussion.

Proposal 3 – Allocation and reallocation

When discussing the “Allocation” processes we need to be clear as to the meaning of the term. An *Allocation*, to paraphrase the ITU definition, is the designation of a band of frequencies (a block of spectrum) for use by one or more service types. In other words we allocate a band to a *use*, not to a *user*.

The wording of Proposal 3 implies different meanings to the term “allocation” in some instances. Some aspects of Proposal 3 relate to the matter of deciding who is to be the recipient of particular licences (in spectrum that is already allocated to a service). In the absence of a better term this might be described as the *licensing* action, it is not the *allocation* process.

Because of the ambiguity in the wording is difficult to comment on the Proposal as written. Nevertheless we agree that the move to a single licensing system would be beneficial to the licensing process however described.

Proposal 4 - Pricing and Market information

The Consultation Paper contains various references to the role of market forces and spectrum pricing. As a starting point it might be useful to clarify our thoughts as to exactly what we expect the market and spectrum pricing to achieve.

The opening paragraph of Proposal 4 contains the bold assertion that “*Market-determined or market-equivalent prices play a key role in determining spectrum value and driving efficient use and*

reuse of spectrum.” But where is the evidence for this assertion? Certainly we would accept that there is some role for market forces and pricing but what exactly is that role?

The concept of spectrum management by market forces has been debated vigorously over the past 25 years, but after nearly 20 years of practical experience since the first spectrum licenses were issued surely it is no longer necessary to speculate about what could or should happen – surely it is time to look at what did happen. The reality is that significant secondary trading has not occurred, as least not to the extent required to establish viable spectrum markets. As the business plans of some initial hopeful start-ups have failed their spectrum holdings have generally gravitated to the control of the major mobile carriers where they have remained. Other spectrum licensees have been content to “sit” on their licenses, unused, despite the very significant prices they may have paid for those licences.

So what can markets and pricing mechanisms do?

Firstly we would suggest they can do exactly what they have been doing for the past 20 years under Spectrum Licensing. Price based auctions are a way of distributing significant spectrum assets in situations where there is contention between “like” would-be licensees. The classic case is the distribution of “new” spectrum for public mobile telecommunications following a re-allocation. But even then there are limitations. If the competing licensees are not “like”, i.e. if they are not comparably resourced, then administrative intervention may be needed to pre-condition the auction process. (Unlike commercial entities, public benefit users will not have future revenue streams against which amortise their investments.)

Spectrum pricing might also have a role in moderating demand for spectrum in the day-to-day licensing of the more traditional service types, e.g. private land mobile services and fixed links. An increase in the tax should incentivise licensees to minimise their spectrum demands, or at least relinquish unused licences. But, in our opinion, the license tax is a very blunt instrument when used in this way. Again the problem is the vast discrepancy in the value of a dollar from one licensee to the next. Large well-resourced organisations might be prepared to retain unused channels simply because the licence taxes are small in the overall context of other business expenses. Or agencies, having built the recurring cost of the licences into their annual budgets, might not then identify unused licences as cost saving opportunities. We would caution against unrealistic expectations for licence taxes to be the panacea for managing excessive spectrum demand, whether those taxes are set by opportunity cost or any other method.

A third possible economic lever is the facility for trading in licences. Tradability is sometimes seen as a distinguishing characteristic of spectrum licensing. But the reality is that apparatus licences can be also be traded under the current licensing regime. And the trade can be accompanied by a privately agreed financial consideration or otherwise. So tradability is really a non-issue in terms of reform, it is already possible under both forms of licensing. In our view tradability of licences should remain the default position in all cases except perhaps where “bespoke” licences are issued in response to special needs and circumstances.

A further aspect relating to markets and trading that may require clarification is the “proprietary” nature of licences. Spectrum licences are often described as “property rights” (therefore logically tradable) whereas apparatus licences are more commonly thought of as just “licences”, i.e.

permissions to access the spectrum without ownership of title. Is there such a distinction in a legal sense- perhaps not? The fact that spectrum licences do expire and revert to the Crown unless renewed suggests they are not real property. In any event our view is that all licences should be merely “permissions” to access certain spectrum under prescribed licence conditions. “Title” to the spectrum (if that concept can exist) should always rest with the Crown.

Proposal 5 - Structuring payments

We generally agree that the ACMA should have the flexibility to set payment arrangements via a condition on the licence.

A further option not canvassed in the Consultation Paper might be the right to refunds if licences are surrendered prior to their expiry date. That arrangement could include some minimum refund threshold or penalty to discourage small value transactions. Refunds are already available under apparatus licensing.

If refunds were available to the high cost licences acquired at auction (or otherwise) the need to stump up the very large up-front fee would remain as a disincentive to frivolous bidders but it would encourage the surrender of any excess capacity in the longer term. The potential “risk to the Commonwealth” through loss of revenue should not be a concern if the objective of maximising spectrum productivity ranks higher than the collection of licence tax revenue!

In any event security of tenure should not be enhanced by pre-payment of fees. Security of tenure should be determined by an explicit condition of the licence or licence type.

Proposal 6 - “Open Data” to support an efficient market

In our view Australia spectrum usage data is already very transparent via the public availability of the Register of Radiocommunications Licences (RRL). And the data is updated daily. The initiative to release this data was an enlightened one, taken some thirty years ago in the spirit of the FOI Act. It is probably fair to say that Australia was (and still is) ahead of most other administrations in this regard. The opportunity to mine this data for statistics and trends is available to anyone interested in doing so. Continue to put that data in the public domain and let interested users serve themselves. We do not see further processing of this data for public consumption as being something that warrants further resources from the regulator.

The Consultation Paper seems to imply that there is a current lack of information which is inhibiting the operations of an efficient spectrum market. But it is difficult to see what more information could be needed. In our opinion spectrum markets are inhibited by more fundamental factors, in particular the limited number of potential buyers and sellers in the most contested bands and the vast discrepancies in the market power of the various participants.

Certainly the collection and dissemination of other data, such as equipment supply data, might be useful for other spectrum management functions, compliance for example. However the collection of such data could be onerous, both for the regulator and for industry and should only be done if a clear and worthwhile benefit can be established.

Proposal 7 – Compensation for resumption of licences

A proposal the pay compensation for resumption of licences could be described as “courageous”. The ACMA (or at least its predecessor) has traditionally maintained a “no compensation” policy – presumably to avoid completely the potential for disputes and arbitrations about compensation rules. The question of just compensation is a vexed one – for example what compensation arrangements might have applied for the 700 MHz digital dividend clearing?

Nevertheless we see merit in the proposal as outlined in the Consultation Paper, particularly if compensation is constrained to certain circumstances by licence conditions. In principle if the re-allocation of bands for an alternative use can be facilitated by the payment of compensation to the incumbents it does seem sensible that some part of the revenue that might be raised after such re-allocation be used to facilitate the clearing of the band.

Proposal 8 – Greater user involvement in spectrum management

As implied by the Consultation Paper a number of models might be considered here.

One model is already in operation – the Department of Defence is effectively the Band Manager for Defence spectrum. Similar arrangements might be extended to other agencies, e.g. the management of the aeronautical bands by Airservices Australia, and the Maritime Bands by AMSA. These organisations already have some role in the management of the bands relevant to their activities. Of course that leaves aside the question of whether such organisations would want further responsibility, having regard for staffing, funding etc. This work is, after all, the responsibility of the ACMA.

Tentative steps have been taken towards devolving management responsibility for the so-called “400 MHz government band” to the NCCGR. However that situation is somewhat problematic given that the NCCGR does not have full time staffing or specific resourcing. This case illustrates the need for careful planning, clear lines of demarcation of responsibilities, and the necessary capacity and resources if such arrangements are to be successful.

Nevertheless we think the alternative concept of “commercial” band managers is worthy of further discussion and development. Essentially this concept would involve the outsourcing by the ACMA of a number of aspects of their traditional function, as outlined in the Consultation Paper.

Proposal 9 – Device supply regulation

We have no reason to disagree with anything that is proposed here. But this is not an area where we have particular experience or expertise so we have nothing of substance to contribute at this stage.

Proposal 10 – Compliance and Enforcement

As for Proposal 9 above.

Proposal 11 - Moving spectrum to its highest value

Few might disagree with the ideal of “moving spectrum to its highest value”, but in a practical sense the concept is really of little use – because it is virtually impossible to implement. The concept implies that competing needs can be evaluated and ranked, but how can this be done if we agree that “value” involves much more than the price that a user might be prepared to pay initially to

secure the licence. Although the concept has been around for many years now we are unaware of a single case where competing uses have been measured and scored in an objective way.

Take the case of a block spectrum in the 900 MHz band that might be used for broadband communications for law enforcement and emergency service, or alternatively, for public mobile telecommunications. Consider the “value” factors in the first option - the reduced operational costs from better communications, the potential savings through avoidance or mitigation of disasters through better communications, the “economic” value of potential lives saved etc. On the other side there is the benefit of better or more extensive public mobile telecommunications. Whilst a dollar figure might be put on the value of such things, to do so in a regular and systematic way prior to making spectrum available would be a massive undertaking. And then, how does one evaluate the incremental increase in value that would be derived when spectrum is already available for a particular use? Realistically this conundrum will not be resolved by analytic economic analysis to determine “highest value”, it will be resolved by the most persuasive case that is put, and perhaps eventually by political intervention. Essentially it will be a subjective decision-making process not an objective one. And perhaps that is really the only way it can be done.

This proposal seems to lack the specificity of some of the earlier Proposals. It is not clear to us what the “reform” aspects might be. The activities proposed here are really no more than would be expected to be undertaken within the normal course of the periodic review and re-planning of spectrum, as has been done for many years – this is the essence of spectrum planning.

If the spectrum reform process is to achieve real outcomes it needs to focus on realities and practicalities. It needs to address the question of “how”.

Additional Proposal

The hallmark of good spectrum management is the elimination of “scarcity”. If scarcity is perceived users will tend to hoard spectrum, sometimes with little regard for the cost of the licence taxes. This hoarding gives rise to further scarcity. The UHF land mobile bands are good examples of this.

Alternatively if users are confident of channels being available as required there will be less incentive to hoard, they will be more likely to return channels to the “pool” when they are no longer needed. The point to point microwave bands are good examples of this. Good management over a long period of time has given users confidence that their requirements can usually be met, without the need to hoard.

Logically the probability of scarcity increases if we must accommodate not only actual needs but contingency needs also. We therefore suggest a management policy that seeks to ensure that spectrum holdings (licences) are actually utilised. The fine print of such a policy would need to have regard for such things as the reasonable delay between acquiring a licence and the new service being commissioned, and for other reasonable “non-use” circumstances. But generally the renewal of a licence should be contingent upon an annual declaration by the licensee that the spectrum is currently in use and is still required for the operation of the service.

Such a policy (use it or lose it) may be at odds with the economic view that “use” of the spectrum is irrelevant. So long as the licensee continues to hold the licence the spectrum must be in the hands of the user who values it most, otherwise it would be sold to a licensee who values that spectrum more highly. But for whatever reason we do not see this theory playing out in reality. We therefore suggest a more “hands-on” approach (use it or lose it) is necessary.

Inevitably a simple “use it or lose it” policy will not fit all circumstances. Such a policy would need to be refined to accommodate the circumstances of major system operators to facilitate good long term planning and development. But in its simplest form it would seem to have potential to relieve congestion in shared bands where there is contention for channels. The land mobile service is an example of this. Irrespective of how it is viewed, the fact remains that spectrum that goes unused while there are potential users in need is an opportunity lost.

The question of spectrum embargos is also a matter that needs to be considered in the context of maximisation of spectrum utilisation. Embargos are often used as a planning tool to avoid new licenses in spectrum that is likely to be re-allocated or otherwise re-planned in the foreseeable future. But this practice can result in significant amounts of spectrum going unused for significant periods of time. An alternative would be to permit licensing to continue in these bands but with clear caveats to the effect that the band is under review and there is the likelihood that licenses will not be renewed beyond a certain date. Such a policy might provide at least some short term opportunities for users who might be in a position to take advantage of these.

The maximisation of spectrum utilisation also needs to be moderated in the context of good long term planning. Adequate spectrum provisions need to be retained for new and emerging services. As a general principle we believe that good spectrum planning should seek to accommodate all reasonable current needs whilst maximising options to accommodate likely future requirements.

In summary we believe that the Spectrum Review process should carefully consider the importance (or otherwise) of spectrum utilisation and enunciate clear policies in this regard.

Timeframes for reform and transitional arrangements

Obviously the timeframe for implementation of reforms will depend upon the extent of those reforms, and the extent to which changes to the Act might be required.

Clearly transitional arrangements will be a key consideration – particularly in the case of spectrum licences. However if a new licensing structure can provide a level of certainty and flexibility at least equivalent to that afforded by the existing spectrum licences (which inevitably it must do to succeed) the holders of spectrum licences might then voluntarily surrender their current licences (or agree to their cancellation) in return for replacement unified licences. Alternatively the current spectrum licences could continue on to expiry – but in many cases that would extend the transition period to almost 2030!

Some extent of reform might be possible under the current Act, or perhaps with relatively minor amendments to the Act. In that case some implementation might be possible within 6 to 12 months of the completion of the Review. Some implementation of a unified licensing arrangement might be possible under the current provisions for Apparatus Licensing.?

Nevertheless however our preference would be to see a comprehensive overhaul of the current spectrum management arrangements, complete with a new Act. That process could be some two to three years in the making.